	SEQUENCE LISTING
	RAL INFORMATION:
(i)	APPLICANT: Massachusetts Institute of Technology
	TITLE OF INVENTION: Class BI and CI Scavenger Receptors
	NUMBER OF SEQUENCES: 8
(iv)	CORRESPONDENCE ADDRESS:
	(A) ADDRESSEE: Patrea L. Pabst
	(B) STREET: 2800 One Atlantic Center
	1201 West Peachtree Street
	(C) CITY: Atlanta
	(D) STATE: Georgia
	(E) COUNTRY: USA
	(F) ZIP: 30309-3450
(v)	COMPUTER READABLE FORM:
	(A) MEDIUM TYPE: Floppy disk
	(B) COMPUTER: IBM PC compatible
	(C) OPERATING SYSTEM: PC-DOS/MS-DOS
	(D) SOFTWARE: PatentIn Release #1.0, Version #1.25
(vi)	CURRENT APPLICATION DATA:
	(A) APPLICATION NUMBER:
	(B) FILING DATE:
	(C) CLASSIFICATION:
(viii)	ATTORNEY/AGENT INFORMATION:
	(A) NAME: Pabst, Patrea L.
	(B) REGISTRATION NUMBER: 31,284
	(C) REFERENCE/DOCKET NUMBER: MIT6620
(ix)	TELECOMMUNICATION INFORMATION:
	(A) TELEPHONE: (404) 873-8794
	(B) TELEFAX: (404) 873-8795
(2) INFO	RMATION FOR SEQ ID NO:1:
(i)	SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 20 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: single
	(D) TOPOLOGY: linear
(ii)	MOLECULE TYPE: DNA
	HYPOTHETICAL: NO
(iv)	ANTI-SENSE: NO
(x)	PUBLICATION INFORMATION:
	(A) AUTHORS: Ashkenas, et al.
	(C) JOURNAL: J. Lipid Res.
	(D) VOLUME: 34
	(F) PAGES: 983-1000
	(G) DATE: 1993
	(K) RELEVANT RESIDUES IN SEQ ID NO:1: FROM 1 TO 20
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:1:
,,	
AATGAAGA	AC TGCTTAGTTT
(2) INFO	RMATION FOR SEQ ID NO:2:
(i)	SEQUENCE CHARACTERISTICS:
	(A) LENGTH: 18 base pairs
	(B) TYPE: nucleic acid
	(C) STRANDEDNESS: single
	(D) TOPOLOGY: linear
(ii)	MOLECULE TYPE: DNA
(iii)	HYPOTHETICAL: NO
	ANTI-SENSE: NO
(x)	PUBLICATION INFORMATION:
(21)	(A) AUTHORS: Ashkenas, et al.
	(C) JOURNAL: J. Lipid Res.
	(D) VOLUME: 34

(F) PAGES: 983-1000
(G) DATE: 1993
(K) RELEVANT RESIDUES IN SEQ ID NO:1: FROM 1 TO 18
(Xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

18

121	INFORMATION	FOR	SEO	TD	NO: 3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 1788 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 (B) LOCATION: 156..1683

 - (D) OTHER INFORMATION: /function= "Nucleotides 156 through 1683 encode the amino acid sequence for

the Hamster Scavenger Receptor Class

B-I."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

60	CTGGAACGTG	ACTCACCTTG	ACTGCCTGAG	TGCTCCGGCC	GGGCTACTGC	GCCACCTGCA
120	CCCTTCAGTC	GTCGCTGTCC	TGTCGCTTCT	CTGTGGCCTC	TCTGTCATCT	AGCCTCGGCT
180	AGGGCGCGCT	CGGCAGCGCC	CGGACATGGG	GCCGCACACG	GCGAGCCCGG	CCTGAGCCCC
240	GTGGTTATGA	TGTGCTCGGT	TGCTGTGCGC	GTCGTGGGGC	GGGGCTGGGC	GGGTGGCGGT
300	ATAGACCCCA	GAATGTCCGC	AGGTACTGAA	ATCAAACAGC	GCCCTCGCTC	TCCTCGTGAT
360	TCCGTCTACT	CTTCTACTTG	TCCCTGTACC	TGGAAGGAGA	CTTTGCAATG	GCAGCCTGTC
420	GTGCGGGAGC	GAAGCCAGTA	TAAAGGGTGA	AGCGAGATCC	GGTCAATCCC	TCTTCGAGGT
480	AATGACAATG	CATCACCTTC	ATAAGGCCAA	GAATTCAGAC	TGTCTACAGG	GTGGACCCTA
540	TCCCACGGCT	GCCGGACAGG	TCCATTTCCA	CACCGCAGCC	CTTTGTGGAG	ATACTGTGTC
600	GTAATGATGG	GGGGGCGCA	TTCTGGTCTT	CTGCCTAACA	CTACATTATA	CTGAGAGTGA
660	TTGGGCCAGC	GCTGGCCACC	TGACCTTGGG	AAGCTGATGA	TGCAGGCCTG	AGAGCAAGTC
720	CCCTTCGTGA	CTATGAGGAT	TCCTGTGGGG	GTTGGTGAGA	GAACCGAACA	GTGCCTTTAT
780	GGCCTGTTTG	GGGCAAGTTC	TCCCCATCAA	CCAGACATGT	CAAATACTTA	ATTTTATCAA
840	CAGAACTTCA	CACGGGCGTC	TCACTGTGTT	TCTGGGCTCT	CAACTCAGAC	TTGAGATGAA
900	TGGCATTCAG	GGTCAACTAC	GGCTCAGCAA	AGATGGAATG	CCTGGTGGAC	GCAAGATCCA
960	ATGACACCCC	GGCACCATTC	GGCAGATGTG	GGCACTTCCG	CATGATCAAT	AGCAGTGCAA
1020	ACCTACCATG	TATGAAGCTC	CCTGCAGGTC	AGTCCGGAAG	GGAATTCTTC	AGTCCTCGCT
1080	ACTTTGTTTG	AGCCCCTAAA	ATCGCTTCAC	ATCCCCACCT	GTTTGAAGGC	ATTCAGGGGT
1140	TCCGGCATTC	GTGCCTTGAA	GTTTCTGCCC	CCCAATGAAG	TGTTTACCCA	CCAATGGGTC
1200	CACTTCTACA	GTCACACCCT	CCCTGTTTCT	TTTGGTGCAC	CACTTGCAGG	AAAATGTCAG
1260	AGGGAGCATT	CCCTGACCCA	TGGGTCTGAA	GAAGCCGTTC	TGTGCTATCA	ATGCAGACCC
1320	GTGAAGTTGC	GAACTGTTCT	GGATCCCCAT	CCGGTCACTG	TGACATCCAT	CTTTGTTCCT
1380	ATCGAGCCCG	AACAGGGAAG	GCATTGGGCA	GCTGTCAAGG	CTACATCAAA	AGATAAGCCT
1440	CCCCTGAACA	GGGCGGCGAG	GCGGTGCCAT	TTTGAGCAGA	ATTGCTGTGG	TGGTCCTCCC
1500	TATGTGCTGC	GTATGTGCAG	AGGTACTTCA	CTGATGCCCC	GCAGCTGGTG	CGTTCTACAC
1560	AGCCAGGAGA	CCAGTTGCGC	CCGTCATCTA	CTGCTGGTGC	CGGCCTCCTG	TGGGGCTGGG

РСТЛІЅ

57															
AATGCTTT	TT A	TTTT	GGAG'	r gg	TAGT.	AAAA	AGG	GCTC	GCA	GGAT.	AAGG	AG G	CCAT	TCAG	G 1620
CCTACTCT	GA Gʻ	TCTC'	TGAT	G TC	ACCA	GCTG	CCA	AGGG	CAC	GGTG	CTGC	AA G	AAGC	CAAG	C 1680
TGTAGGGT	cc c	AAAG.	ACAC	CAC	GAGC	cccc	CCA	ACCT	GAT	AGCT'	TGGT	CA G	ACCA	GCCA	T 1740
CCAGCCCC'	TA C	ACCC	CGCT	r CT	TGAG	GACT	CTC	TCAG	CGG	ACAG'	TCGC				1788
(ii) (iii)	SEQUENT OF THE PROPERTY OF THE	UENC!) LEI) TY:) TO: ECUL! OTHE' GMEN' URE:) NAI	E CHI NGTH PE: 8 POLO E TY	ARAC' 50: 50: 5Y: FE: FE: FE: FE: FE: FE: FE: FE: FE: FE	TERIS 9 am 0 ac lines prote 0 inte	STIC: ino a id ar ein rnal feat	acid	5							
							/fw	nctio	on=	"Amiı	no ac	id :	sequ	ence	for the
(ix)	(A) (B) (D)	NAI LOC OTI	ME/KI CATIO HER	ON:	93	2	/not		'Put	venge ative		-			5 B-1."
(ix)	(A) (B)	NAI	ME/KI	ON: 4	440.	.464		ce= '		ative	e tra	ınsmo	embra	ane	
(ix)	(A) (B)	NAI LO	ME/KI	N: 3	138	35 ION :	-site /not 173-1	e= " 175,	'Pos 212 330		, 227 and	7-229 383	9, 2! -385	55-25 repi	
(ix) (xi)	(A) (B) (D)	NAI LOC OTI	ME/KI CATIO HER I	ON: 2 INFOI	214 RMAT	fied 170 ION:	/not 21, 470 lin	e " 251, repr	'The 28 cese:	cyst	ceine 21, 3	es at	t pos	sitio	ons 4 and
										Ala	Val	Gly	Leu	Gly 15	Val
Val	Gly	Leu	Leu 20	Cys	Ala	Val	Leu	Gly 25	Val	Val	Met	Ile	Leu 30	Val	Met
Pro	Ser	Leu 35	Ile	Lys	Gln	Gln	Val 40	Leu	Lys	Asn	Val	Arg 45	Ile	Asp	Pro
Ser	Ser 50	Leu	Ser	Phe	Ala	Met 55	Trp	Lys	Glu	Ile	Pro 60	Val	Pro	Phe	Tyr
Leu 65	Ser	Val	Tyr	Phe	Phe 70	Glu	Val	Val	Asn	Pro 75	Ser	Glu	Ile	Leu	Lys 80
Gly	Glu	Lys	Pro	Val 85	Val	Arg	Glu	Arg	Gly 90	Pro	Tyr	Val	Tyr	Arg 95	Glu
Phe	Arg	His	Lys 100	Ala	Asn	Ile	Thr	Phe 105	Asn	Asp	Asn	Asp	Thr 110	Val	Ser

Phe Val Glu His Arg Ser Leu His Phe Gln Pro Asp Arg Ser His Gly 115 120 125

58 Ser Glu Ser Asp Tyr Ile Ile Leu Pro Asn Ile Leu Val Leu Gly Gly 135 Ala Val Met Met Glu Ser Lys Ser Ala Gly Leu Lys Leu Met Met Thr Leu Gly Leu Ala Thr Leu Gly Gln Arg Ala Phe Met Asn Arg Thr Val 165 Gly Glu Ile Leu Trp Gly Tyr Glu Asp Pro Phe Val Asn Phe Ile Asn 180 185 Lys Tyr Leu Pro Asp Met Phe Pro Ile Lys Gly Lys Phe Gly Leu Phe Val Glu Met Asn Asn Ser Asp Ser Gly Leu Phe Thr Val Phe Thr Gly Val Gln Asn Phe Ser Lys Ile His Leu Val Asp Arg Trp Asn Gly Leu 230 235 Ser Lys Val Asn Tyr Trp His Ser Glu Gln Cys Asn Met Ile Asn Gly 250 Thr Ser Gly Gln Met Trp Ala Pro Phe Met Thr Pro Gln Ser Ser Leu 265 Glu Phe Phe Ser Pro Glu Ala Cys Arg Ser Met Lys Leu Thr Tyr His 280 Asp Ser Gly Val Phe Glu Gly Ile Pro Thr Tyr Arg Phe Thr Ala Pro 295 Lys Thr Leu Phe Ala Asn Gly Ser Val Tyr Pro Pro Asn Glu Gly Phe 315 310 Cys Pro Cys Leu Glu Ser Gly Ile Gln Asn Val Ser Thr Cys Arg Phe 325 330 Gly Ala Pro Leu Phe Leu Ser His Pro His Phe Tyr Asn Ala Asp Pro 345 Val Leu Ser Glu Ala Val Leu Gly Leu Asn Pro Asp Pro Arg Glu His Ser Leu Phe Leu Asp Ile His Pro Val Thr Gly Ile Pro Met Asn Cys 375 Ser Val Lys Leu Gln Ile Ser Leu Tyr Ile Lys Ala Val Lys Gly Ile 390 Gly Gln Thr Gly Lys Ile Glu Pro Val Val Leu Pro Leu Leu Trp Phe Glu Gln Ser Gly Ala Met Gly Gly Glu Pro Leu Asn Thr Phe Tyr Thr 425 Gln Leu Val Leu Met Pro Gln Val Leu Gln Tyr Val Gln Tyr Val Leu 440 Leu Gly Leu Gly Gly Leu Leu Leu Val Pro Val Ile Tyr Gln Leu Arg Ser Gln Glu Lys Cys Phe Leu Phe Trp Ser Gly Ser Lys Lys Gly Ser Gln Asp Lys Glu Ala Ile Gln Ala Tyr Ser Glu Ser Leu Met Ser

Pro Ala Ala Lys Gly Thr Val Leu Gln Glu Ala Lys Leu

500 505

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 2032 base pairs
 (B) TYPE: nucleic acid

 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (ix) FEATURE:
 - (A) NAME/KEY: misc. feature (B) LOCATION: 40..1926

 - (D) OTHER INFORMATION: /Function = "Nucleotides 40 through

1926 encode the amino acid sequence for the Drosophila Melanogaster

Scavenger Receptor Class CI."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GACCGTATCT	ATACATTAAG	TTCGTAATAT	CTCTGCGGAA	TGGAATTTTT	CTGGACTCTG	60
GCTGTGATTG	TGATATATTG	TATAGGTCAC	ATTCATGGAC	GATGTGAAAG	ATCTATAGAT	120
TTGGATAATG	GAAGTATAAA	TTATCGACAG	AGAAATATAG	TGAGATTCAG	ATGCAATCGC	180
GGCTACACTT	TGCAGGGAAC	AGTAATGCAA	ACTTGCGATC	GAGATGGTCG	CCTTCGAGGC	240
GAAAAACCAT	TCTGTGCCAG	TAGGGGATGT	GCGAGGCCCG	AGGATCCGGA	GAACGGACAC	300
GTCGAAAATC	TTTCCCTAAG	GGCGGATGTC	GTGTGCCACG	ATGGCTATGT	CTTGGTCGGT	360
GGTCGCACTG	CCTACTGCGA	TGGAGAAAGA	TGGAGCACCC	AGCTGGGATC	GTGTCGAAGG	420
AGCAACCACA	CAAGAGATCA	TTCTTGCGAT	TTCGAGAGCG	AGGATCAGTG	CGGTTGGGAG	480
GCGGAGACAA	CCTTCCGACG	ACCCTGGAAG	CGAGTCAGCA	CGGTATCCGA	TATTCACTCC	540
CTAAGAACGG	GACCCCGCCA	CGATCACACG	TTTAAAAACG	AATCCGGTGG	TCATTACATG	600
CGCATGGAAA	CCCAAATGGG	GGCTTATGGA	AGCTACCATC	TGCTATCGCC	GATCTATCCC	660
AGATCCCTCA	CCCTGAAGAC	CGCCTGCTGC	TTTCGATTCC	ACTACTTCAT	GTTTGGCGCT	720
GGTGTGGATA	ATCTGGTGGT	GTCCGTTAAA	CCCGTTTCGA	TGCCAATGGC	AACCATGTGG	780
AATAGGTTCA	GAGCCAATTG	CAGCAAATTT	GAGATATCTG	GTCAGCAGGG	AACCCAGTGG	840
CTAGAGCACA	CGATCAGCAT	TGACGAGATG	CAAGAGGACT	TCCAGGTGAT	ATTCACGGCA	900
ACGGATGCAA	GATCCCAATT	CGGAGATATT	GCCATCGATG	ATGTAAAGCT	AATGACAGGC	960
AGTGAGTGTG	GCACAAACGG	ATTTAGCACC	ACCACAGAAC	CAACGGCTCC	GACAGGCAGC	1020
AACGAGCAAC	CACTGGTCTA	CGATATGATA	AGTTGTTCAG	GTCGATGCGG	AACATCAATG	1080
TCGGCCTCCA	ATATAACCAA	CAATGGTATA	GTCATGGGAT	GTGGATGTAA	TGACGAGTGC	1140
CTTTCGGATG	AGACTTGTTG	CCTAAACTAT	TTGGAGGAGT	GCACAAAGGA	GCTGCTCACC	1200
ACGACCGAGG	ATGATATTAG	TTCCCTGCCC	CCAACGGTCA	CATCAACAAG	CACAAGCACT	1260
ACGAGGAAGT	CAACAACAAC	AACAACCACA	AGCACGACTA	CTACAAGTAC	AACAACAACT	1320
AAAAGGCCAA	CCACAACCAC	AACAACAACA	AAGGCCACAA	CTACAAAGCG	AACAACAACC	1380
ACTAAAAAAC	CGACAACAAC	TTCAACAACG	CCGAAGCCAA	CAACAACGAC	TTCAACCACA	1440
CCAAAGTCTA	CAACTTCTAC	AACGTCTACA	ACTTCAACAA	CACCAACGAC	AACAACTACA	1500

ATAAATGTGT	TTACAACAAA	GAAAACAACA	ATAATGATCC	CTACTTCCAG	TACCGAAAAG	1560
ACTACAGGCA	TCATCACCAC	CATGAAGACA	CGCAAGCGCA	TCACTTGGAA	CGTTGATCCT	1620
CAGGACATCG	AGGGTCACAT	GGACACGAGC	GGAAGTACCC	CCAATCCAGC	TTTAGTAGTA	1680
CTTTACCTGC	TACTCGGCAT	TGTTCTGGTG	GTAGTTCTGG	CCAACGTCGT	TAATCGCTGG	1740
ATAATACCAA	TCACTGGATC	AAAGACCAGC	AGCGAAAAGG	CTGTGAGATT	CAAGAAGGCA	1800
TTCGATAGTC	TGAAGAAGCA	ACGGAAAAGA	AACAGCATGG	ATGATCAGCC	GTTATGCGAC	1860
TCCGATAACG	ACGATGTAGA	GTATTTCGAA	GAAATGGGCG	TGGACATACG	ACATAGGACC	1920
GATCTATGAG	GGTAATCCCC	AGTGATACCA	AAACAAACGC	TTAGGCCTGT	GCCTATTGTA	1980
TAGGATGTTT	CTAAATGTGT	ATGCAAGAAT	CGAATAAAAG	AAAATATGCA	AC	2032

- (2) INFORMATION FOR SEQ ID NO:6:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 629 amino acids
 - (B) TYPE: amino acid
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: protein
 (iii) HYPOTHETICAL: NO
 - - (v) FRAGMENT TYPE: internal
 - (ix) FEATURE:
 - (A) NAME/KEY: misc. feature
 - (B) LOCATION: 1..629
 - (D) OTHER INFORMATION: /Function = "Amino acid sequence for the Drosophila Melanogaster Scavenger Receptor Class CI."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 30..353
 - (D) OTHER INFORMATION: /note= "Positions 30-32, 90-92, 129-131, 180-182, 253-255 and 351-353 represent potential N-glycosylation sites."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1..20
 - (D) OTHER INFORMATION: /note= "Amino acids 1-20 represent a putative signal sequence."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 21..74
 - (D) OTHER INFORMATION: /note= "Amino acids 21-74 represent complement control protein domain number 1."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 75..127
 - (D) OTHER INFORMATION: /note= "Amino acids 75-127 represent complement control protein domain number 2."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 128..312
 - (D) OTHER INFORMATION: /note= "Amino acids 128-312 represent an MAM domain."
 - (ix) FEATURE:
 - (A) NAME/KEY: Disulfide-bond
 - (B) LOCATION: 22..381
 - (D) OTHER INFORMATION: /note= "The cysteines at positions 22, 45, 59, 72, 77, 99, 113, 125, 136, 144, 216, 217, 254, 310, 339, 343, 361, 363, 367, 373, 374 and 381 represent potential disulfide linkages."
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site

(B) LOCATION: 338..381

(D) OTHER INFORMATION: /note= "Amino acids 338-381 represent a somatomedin B domain."

(ix) FEATURE:

(A) NAME/KEY: Modified-site (B) LOCATION: 387..514

(D) OTHER INFORMATION: /note= "Amino acids 387-514 represent a mucin-like potential O-linked glycosylation region."

(ix) FEATURE:

(A) NAME/KEY: Domain

(B) LOCATION: 544..564

(D) OTHER INFORMATION: /note= "Amino acids 544-565 represent a putative TM domain."

(ix) FEATURE:

(A) NAME/KEY: Domain

(B) LOCATION: 565..629

(D) OTHER INFORMATION: /note= "Amino acids 565-629 represent a putative cytoplasmic

domain."

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 576..602

(D) OTHER INFORMATION: /note= "Amino acids 576-579 and 599-602 represent casein kinase II sites."

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 578..592

(D) OTHER INFORMATION: /note= "Amino acids 578-580 and 590-592 represent protein kinase C

sites."

(ix) FEATURE:

(A) NAME/KEY: Modified-site

(B) LOCATION: 596..599

(D) OTHER INFORMATION: /note= "Amino acids 596-599

represent a cAMP protein kinase site."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

Met Glu Phe Phe Trp Thr Leu Ala Val Ile Val Ile Tyr Cys Ile Gly

His Ile His Gly Arg Cys Glu Arg Ser Ile Asp Leu Asp Asn Gly Ser

Ile Asn Tyr Arg Gln Arg Asn Ile Val Arg Phe Arg Cys Asn Arg Gly

Tyr Thr Leu Gln Gly Thr Val Met Gln Thr Cys Asp Arg Asp Gly Arg

Leu Arg Gly Glu Lys Pro Phe Cys Ala Ser Arg Gly Cys Ala Arg Pro

Glu Asp Pro Glu Asn Gly His Val Glu Asn Leu Ser Leu Arg Ala Asp

Val Val Cys His Asp Gly Tyr Val Leu Val Gly Gly Arg Thr Ala Tyr

Cys Asp Gly Glu Arg Trp Ser Thr Gln Leu Gly Ser Cys Arg Arg Ser 120

Asn His Thr Arg Asp His Ser Cys Asp Phe Glu Ser Glu Asp Gln Cys

Gly Trp Glu Ala Glu Thr Thr Phe Arg Arg Pro Trp Lys Arg Val Ser 155

Thr Val Ser Asp Ile His Ser Leu Arg Thr Gly Pro Arg His Asp His

				165					170					175	
Thr	Phe	Lys	Asn 180	Glu	Ser	Gly	Gly	His 185	Tyr	Met	Arg	Met	Glu 190	Thr	Gln
Met	Gly	Ala 195	Tyr	Gly	Ser	Tyr	His 200	Leu	Leu	Ser		Ile 205	Tyr	Pro	Arg
Ser	Leu 210	Thr	Leu	Lys	Thr	Ala 215	Cys	Cys	Phe	Arg	Phe 220	His	Tyr	Phe	Met
Phe 225	Gly	Ala	Gly	Val	Asp 230	Asn	Leu	Val	Val	Ser 235	Val	Lys	Pro	Val	Ser 240
Met	Pro	Met	Ala	Thr 245	Met	Trp	Asn	Arg	Phe 250	Arg	Ala	Asn	Cys	Ser 255	Lys
Phe	Glu	Ile	Ser 260	Gly	Gln	Gln	Gly	Thr 265	Gln	Trp	Leu	Glu	His 270	Thr	Ile
Ser	Ile	Asp 275	Glu	Met	Gln	Glu	Asp 280	Phe	Gln	Val	Ile	Phe 285	Thr	Ala	Thr
Asp	Ala 290	Arg	Ser	Gln	Phe	Gly 295	Asp	Ile	Ala	Ile	Asp 300	Asp	Val	Lys	Leu
Met 305	Thr	Gly	Ser	Glu	Cys 310	Gly	Thr	Asn	Gly	Phe 315	Ser	Thr	Thr	Thr	Glu 320
Pro	Thr	Ala	Pro	Thr 325	Gly	Ser	Asn	Glu	Gln 330	Pro	Leu	Val	Tyr	Asp 335	Met
Ile	Ser	Cys	Ser 340	Gly	Arg	Cys	Gly	Thr 345	Ser	Met	Ser	Ala	Ser 350	Asn	Ile
Thr	Asn	Asn 355	Gly	Ile	Val	Met	Gly 360	Cys	Gly	Cys	Asn	Asp 365	Glu	Cys	Leu
Ser	Asp 370	Glu	Thr	Cys	Cys	Leu 375	Asn	Tyr	Leu	Glu	Glu 380	Cys	Thr	Lys	Glu
Leu 385	Leu	Thr	Thr	Thr	Glu 390	Asp	Asp	Ile	Ser	Ser 395	Leu	Pro	Pro	Thr	Val 400
Thr	Ser	Thr	Ser	Thr 405	Ser	Thr	Thr	Arg	Lys 410	Ser	Thr	Thr	Thr	Thr 415	Thr
Thr	Ser	Thr	Thr 420	Thr	Thr	Ser	Thr	Thr 425	Thr	Thr	Lys	Arg	Pro 430	Thr	Thr
Thr	Thr	Thr 435	Thr	Thr	Lys	Ala	Thr 440	Thr	Thr	Lys	Arg	Thr 445	Thr	Thr	Thr
Lys	Lys 450	Pro	Thr	Thr	Thr	Ser 455	Thr	Thr	Pro	Lys	Pro 460	Thr	Thr	Thr	Thr
Ser 465	Thr	Thr	Pro	Lys	Ser 470	Thr	Thr	Ser	Thr	Thr 475	Ser	Thr	Thr	Ser	Thr 480
Thr	Pro	Thr	Thr	Thr 485	Thr	Thr	Ile	Asn	Val 490	Phe	Thr	Thr	Lys	Lys 495	Thr
Thr	Ile	Met	Ile 500	Pro	Thr	Ser	Ser	Thr 505	Glu	Lys	Thr	Thr	Gly 510	Ile	Ile
Thr	Thr	Met 515		Thr	Arg	Lys	Arg 520		Thr	Trp	Asn	Val 525	Asp	Pro	Gln

100

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:									_							
	Asp	530		Gly	His	Met	Asp 535		Ser	Gly	/ Ser	Thr 540		Asn	Pro	Ala
	Leu 545		Val	Leu	Tyr	Leu 550	Leu	Leu	Gly	, Ile	Val 555		Val	Val	Val	Leu 560
	Ala	Asn	Val	Val	Asn 565		Trp	Ile	Ile	Pro 570		Thr	Gly	Ser	Lys 575	Thr
	Ser	Ser	Glu	Lys 580		Val	Arg	Phe	Lys 585		. Ala	Phe	Asp	Ser 590	Leu	Lys
	Lys	Gln	Arg 595	Lys	Arg	Asn	Ser	Met 600		Asp	Gln	Pro	Leu 605	Cys	Asp	Ser
	Asp	Asn 610		Asp	Val	Glu	Tyr 615	Phe	Glu	Glu	Met	Gly 620	Val	Asp	Ile	Arg
	His 625	Arg	Thr	Asp	Leu											
	(ii) (iii) (iii) (iv) (ix)	(B (C (D MOL HYPO ANT FEA' (A (B	UENCI) LEI) TYI) STI) TOI ECULI OTHE: I-SEI TURE) NAI) LOG) OTI	E CHE NGTH PE: 1 RANDI POLOGE TYI TICAL NSE: ME/KI CATIC HER	ARAC: 17 nucl EDNE GY: PE: No NO EY: 00 INFO	TERI 85 b eic s SS: c line DNA O CDS 51	STIC ase pacid doub ar (gend 1577 ION:	pair le omic /F 15 fo Cl	unct 77 e r th ass	ncod e mu BI."	le th	e am	ino a	acid		rough ience ior
CCG!	rctcc	TT C	AGGT	CCTG	A GC	CCCG	AGAG	ccc	CTTC	CGC	GCAC	GCGG		TG G et G 1		56
	AGC Ser															104
	CTG Leu 20															152
	ATC Ile															200
	TCC Ser															248
	TAC Tyr															296
	CCA	GTA (344

CAA AAG GTC AAC ATC ACC TTC AAT GAC AAC GAC ACC GTG TCC TTC GTG Gln Lys Val Asn Ile Thr Phe Asn Asp Asn Asp Thr Val Ser Phe Val

110

(GGC Gly			440
														GGC Gly			488
														ACC Thr 160			536
I	CTG Leu	GTC Val	ACC Thr 165	ATG Met	GGC Gly	CAG Gln	CGT Arg	GCT Ala 170	TTT Phe	ATG Met	AAC Asn	CGC Arg	ACA Thr 175	GTT Val	GGT Gly	GAG Glu	584
														AAC Asn			632
I	CTC Leu 195	CCA Pro	GAC Asp	ATG Met	CTT Leu	CCC Pro 200	ATA Ile	AAG Lys	GGC Gly	AAA Lys	TTT Phe 205	GGC Gly	CTG Leu	TTT Phe	GTT Val	GGG Gly 210	680
														GGC Gly			728
														CTC Leu 240			776
														GGG Gly			824
														CTG Leu			872
]	rrc Phe 275	AGC Ser	CCG Pro	GAG Glu	GCA Ala	TGC Cys 280	AGG Arg	TCC Ser	ATG Met	AAG Lys	CTG Leu 285	ACC Thr	TAC Tyr	AAC Asn	GAA Glu	TCA Ser 290	920
1	AGG Arg	GTG Val	TTT Phe	GAA Glu	GGC Gly 295	ATT Ile	CCC Pro	ACG Thr	TAT Tyr	CGC Arg 300	TTC Phe	ACG Thr	GCC Ala	CCC Pro	GAT Asp 305	ACT Thr	968
]	CTG Seu	TTT Phe	GCC Ala	AAC Asn 310	GGG Gly	TCC Ser	GTC Val	TAC Tyr	CCA Pro 315	CCC Pro	AAC Asn	GAA Glu	GGC Gly	TTC Phe 320	TGC Cys	CCA Pro	1016
•	rgc Cys	CGA Arg	GAG Glu 325	TCT Ser	GGC Gly	ATT Ile	CAG Gln	AAT Asn 330	GTC Val	AGC Ser	ACC Thr	TGC Cys	AGG Arg 335	TTT Phe	GGT Gly	GCG Ala	1064
:	CCT Pro	CTG Leu 340	TTT Phe	CTC Leu	TCC Ser	CAC His	CCC Pro 345	CAC His	TTT Phe	TAC Tyr	AAC Asn	GCC Ala 350	GAC Asp	CCT Pro	GTG Val	TTG Leu	1112
į	TCA Ser 355	GAA Glu	GCT Ala	GTT Val	CTT Leu	GGT Gly 360	CTG Leu	AAC Asn	CCT Pro	AAC Asn	CCA Pro 365	AAG Lys	GAG Glu	CAT His	TCC Ser	TTG Leu 370	1160
•	TTC Phe	CTA Leu	GAC Asp	ATC Ile	CAT His 375	CCG Pro	GTC Val	ACT Thr	GGG Gly	ATC Ile 380	CCC Pro	ATG Met	AAC Asn	TGT Cys	TCT Ser 385	GTG Val	1208
•	AAG Lys	ATG Met	CAG Gln	CTG Leu	AGC Ser	CTC Leu	TAC Tyr	ATC Ile	AAA Lys	TCT Ser	GTC Val	AAG Lys	GGC Gly	ATC Ile	GGG Gly	CAA Gln	1256

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			390					395					400			
ACA Thr	GGG Gly	AAG Lys 405	ATC Ile	GAG Glu	CCA Pro	GTA Val	GTT Val 410	CTG Leu	CCG Pro	TTG Leu	CTG Leu	TGG Trp 415	TTC Phe	GAA Glu	CAG Gln	1304
AGC Ser	GGA Gly 420	GCA Ala	ATG Met	GGT Gly	GGC Gly	AAG Lys 425	CCC Pro	CTG Leu	AGC Ser	ACG Thr	TTC Phe 430	TAC Tyr	ACG Thr	CAG Gln	CTG Leu	1352
GTG Val 435	CTG Leu	ATG Met	CCC Pro	CAG Gln	GTT Val 440	CTT Leu	CAC His	TAC Tyr	GCG Ala	CAG Gln 445	TAT Tyr	GTG Val	CTG Leu	CTG Leu	GGG Gly 450	1400
CTT Leu	GGA Gly	GGC Gly	CTC Leu	CTG Leu 455	TTG Leu	CTG Leu	GTG Val	CCC Pro	ATC Ile 460	ATC Ile	TGC Cys	CAA Gln	CTG Leu	CGC Arg 465	AGC Ser	1448
CAG Gln	GAG Glu	AAA Lys	TGC Cys 470	TTT Phe	TTG Leu	TTT Phe	TGG Trp	AGT Ser 475	GGT Gly	AGT Ser	AAA Lys	AAG Lys	GGC Gly 480	TCC Ser	CAG Gln	1496
GAT Asp	AAG Lys	GAG Glu 485	GCC Ala	ATT Ile	CAG Gln	GCC Ala	TAC Tyr 490	TCT Ser	GAG Glu	TCC Ser	CTG Leu	ATG Met 495	TCA Ser	CCA Pro	GCT Ala	1544
GCC Ala	AAG Lys 500	GGC Gly	ACG Thr	GTG Val	CTG Leu	CAA Gln 505	GAA Glu	GCC Ala	AAG Lys	CTA Leu	TAGO	GTC	CTG 1	AAGA	CACTAT	1597
AAG	cccc	CCA A	ACCI	GATA	G CI	TGGT	CAG	A CCF	AGCCF	CCC	AGTO	CCTA	ACA (cccc	CTTCT	1657
TGA	GACI	CT C	TCAG	CGGZ	C AC	CCCA	CCA	TGC	CATG	GCC	TGAG	cccc	CA C	GATGT	CACAC	1717
CTG	rccgo	CAC G	CACG	GCAC	A TO	GATO	CCCA	A CGC	ATGI	GCA	AAA	CAAC	TC A	AGGG	ACCAGG	1777
GAC	AGACC	2														1785
(2)	(i) (ii)	SEQ (A (E MOI FEA (A	UENC) LE) TY) TC ECUL TURE) NA) LC	E CHENGTHE POLCE TY CHENGE TY CHENGE TY CHENGE POLCE TY CHENGE POLCE POL	IARACI: 50 amir. OGY: 'PE: CY:	TERI 9 am 10 ac line prot misc	eid ear ein :. fe	ES: ació eatur /F	e unct						equence	fors BI."
•	(>	(i) S	EQUE	NCE	DESC	RIPT	: NOI	SEÇ	ID	NO : 8	:	inger	Rec	eptc	n Clas	S D1.
Met 1	Gly	Gly	Ser	Ser 5	Arg	Ala	Arg	Trp	Val 10	Ala	Leu	Gly	Leu	Gly 15	Ala	
Leu	Gly	Leu	Leu 20	Phe	Ala	Ala	Leu	Gly 25	Val	Val	Met	Ile	Leu 30	Met	Val	
Pro	Ser	Leu 35	Ile	Lys	Gln	Gln	Val 40	Leu	Lys	Asn	Val	Arg 45	Ile	Asp	Pro	
Ser	Ser 50	Leu	Ser	Phe	Gly	Met 55	Trp	Lys	Glu	Ile	Pro 60	Val	Pro	Phe	Tyr	
Leu 65	Ser	Val	Tyr	Phe	Phe 70	Glu	Val	Val	Asn	Pro 75	Asn	Glu	Val	Leu	Asn 80	
Gly	Gln	Lys	Pro	Val 85	Val	Arg	Glu	Arg	Gly 90	Pro	Tyr	Val	Tyr	Arg 95	Glu	

Phe Arg Gln Lys Val Asn Ile Thr Phe Asn Asp Asn Asp Thr Val Ser

			100					105				•	110		
Phe	Val	Glu 115	Asn	Arg	Ser	Leu	His 120	Phe	Gln	Pro	qaA	Lys 125	Ser	His	Gly
Ser	Glu 130	Ser	Asp	Tyr	Ile	Val 135	Leu	Pro	Asn	Ile	Leu 140	Val	Leu	Gly	Gly
Ser 145	Ile	Leu	Met	Glu	Ser 150	Lys	Pro	Val	Ser	Leu 155	Lys	Leu	Met	Met	Thr 160
Leu	Ala	Leu	Val	Thr 165	Met	Gly	Gln	Arg	Ala 170	Phe	Met	Asn	Arg	Thr 175	
Gly	Glu	Ile	Leu 180	Trp	Gly	Tyr	Asp	Asp 185	Pro	Phe	Val	His	Phe 190	Leu	Asn
Thr	Tyr	Leu 195	Pro	Asp	Met	Leu	Pro 200	Ile	Lys	Gly	Lys	Phe 205	Gly	Leu	Phe
Val	Gly 210	Met	Asn	Asn	Ser	Asn 215	Ser	Gly	Val	Phe	Thr 220	Val	Phe	Thr	Gly
225	Gln				230					235					240
	Lys			245					250					255	
	Ser	-	260		_			265					270		
	Phe	275					280					285			
	Ser 290					295					300				
305	Thr				310					315					320
-	Pro	_		325					330					335	
_	Ala		340					345					350		
		355					360					365			His
	Leu 370			_		375					380				
385	Val				390					395					400
	Gln			405					410					415	
	Gln		420					425					430		
	Leu	435					440					445			
	450					455					460				Leu
Arg 465	Ser	Gln	Glu	Lys	Cys 470	Phe	Leu	Phe	Trp	Ser 475	Gly	Ser	Lys	Lys	Gly 480

Ser Gln Asp Lys Glu Ala Ile Gln Ala Tyr Ser Glu Ser Leu Met Ser 485 490 495

Pro Ala Ala Lys Gly Thr Val Leu Gln Glu Ala Lys Leu 500 505